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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/060,236	02/01/2002	William Brent Wilson	P21748	8492

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EXAMINER	
AN, SHAWN S	

ART UNIT	PAPER NUMBER
2621	

DATE MAILED: 09/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/060,236	WILSON, WILLIAM BRENT	
	Examiner	Art Unit	
	Shawn S. An	2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 June 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-25* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *14-20* is/are allowed.

6)☒ Claim(s) *1-13 and 21-25* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Applicant's Remarks/Arguments

1. Applicant's arguments have been carefully considered but are moot in view of the new ground(s) of rejection.

As per Applicant's arguments regarding claim 21, please refer to a simplified version of rejection as discussed below (see section **6**). Furthermore, as a courtesy, Examiner has notified Mr. Ernest regarding this rejection.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321© may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims (1, 4-5, 8) and (9-13) are rejected under the judicially created doctrine of double patenting over claims (1, 4) and (10-12) of U. S. Patent No. 6,389,071 B1, respectively, since the claims, if allowed, would improperly extend the "right to exclude" already granted in the patent.

The subject matter claimed in the instant application is fully disclosed in the patent and is covered by the patent since the patent and the application are claiming common subject matter, as follows:

Claims (1, 4-5, 8) and (9-13) recite substantially all of the subject matter as recited in the patented claims (1, 4) and (10-12). Therefore, the claims 1, 4-5, and 9-13 have been rejected in view of double patenting.

Furthermore, there is no apparent reason why applicant was prevented from presenting claims corresponding to those of the instant application during prosecution of the application, which matured into a patent. See In re Schneller, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

4. Claims 2-3 and 6-7 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 4, and 10-12 of U.S. Patent No. 6,389,071 B1 in view of Malladi et al. (5,818,532).

Regarding claims 2-3 and 6-7, the patent (6,389,071 B1) as described above fails to claim limiting a function of at least one post filter and/or one format conversion filter.

However, Malladi et al teaches reducing the processing power used for one or more decoder function by limiting decoder function in a predetermined manner to reduce the computational requirements of decoding a bitstream (col. 20, lines 31-36 and lines 44-47).

Therefore, it would have been obvious to a person of ordinary skill in the relevant art employing the patent reference (6,389,071 B1) to incorporate Malladi's concept as above, and apply the concept in a conventionally well known post filter and/or format conversion filter for reducing the amount of computational processing requirements, thereby efficiently decoding video bitstream.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Liu et al (5,680,482) in view of Tucker et al (5,903,313).

Regarding claim 21, Liu et al discloses a method of controlling processing requirements of a video decoder that receives and decodes incoming video data, comprising:

measuring an amount of computational processing required to decode at least one bitstream of video data (col. 11, lines 43-56);

measuring of the decoder's processing capability (Fig. 7, 370); and

a picture comprising the decoded video data (Fig. 2, 18).

Liu et al does not particularly disclose reducing processing performed on the decoded video data prior to displaying a picture, by an amount based on the measured computational processing and the measured processing capabilities.

However, Tucket et al teaches reducing (turning off motion compensation) computational processing performed on the decoded video data prior to displaying (125) a picture (Fig. 4A, 340; col. 10, lines 33-51) for avoiding decoder's computational burden (col. 3, lines 59-67; col. 4, lines 1-5).

Tucket et al further teaches a performance monitor (Fig. 3, 205) located in motion decoder for determining performance capability of the host processor and determining other grades of performance as well or a continuum of performance levels (col. 9, lines 27-39).

Therefore, it would have been obvious to a person of ordinary skill in the relevant art employing Liu et al's reference to incorporate the concepts as above as taught by Tucker et al so as to reduce processing performed on the decoded video data prior to displaying a picture, by an amount based on Liu et al's measured computational processing and the measured processing capabilities, thereby avoiding decoder's

computational burden, thereby preventing such as out of sync, freeze in the picture, discontinuities, and jerkiness effects in the picture.

7. Claims 22-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liu et al, and Tucker et al, as applied to claim 21 above, and further in view of Malladi et al. (5,818,532).

Regarding claims 22-23, The combination of Liu et al and Tucker et al does not particularly disclose limiting a function of at least one post filter or one format conversion filter.

However, Malladi et al teaches reducing the processing power used for one or more decoder function by limiting decoder function in a predetermined manner to reduce the computational requirements of decoding a bitstream (col. 20, lines 31-36 and lines 44-47).

Therefore, it would have been obvious to a person of ordinary skill in the relevant art employing the patent reference (6,389,071 B1) to incorporate Malladi's concept as above, and apply the concept in a conventionally well known post filter and/or format conversion filter for reducing the amount of computational processing requirements, thereby efficiently decoding video bitstream.

8. Claims 24-25 and are rejected under 35 U.S.C. 103(a) as being unpatentable over Liu et al (5,680,482) in view of Boyce et al (5,635,985).

Regarding claims 24-25, Liu et al discloses a method of reducing processing requirements of a video decoder that receives and decodes incoming video data, comprising:

measuring an amount of computational processing required to decode at least one bitstream of video data (col. 11, lines 43-56); and

measuring the decoder's processing capability (Fig. 7, 370).

Liu et al does not particularly disclose reducing a number of coefficients inverse quantized and inverse DCT transformed by an amount based on the measured computational processing and the measured processing capabilities,

wherein reducing the number of coefficients inverse quantized and inverse DCT transformed comprises selectively setting coefficients to alternate values.

However, Boyce et al teaches a decoder comprising reducing the number of coefficients inverse quantized and inverse DCT transformed by selectively setting coefficients to alternate values comprising zero (Fig. 1, 126; col. 10, lines 13-24) in order to make the downstream processing of these coefficients less computationally intensive.

Therefore, it would have been obvious to a person of ordinary skill in the relevant art employing Liu et al's reference to incorporate Boyce et al's concepts as above so as to reduce a number of coefficients inverse quantized and inverse DCT transformed by an amount based on Liu et al's measured computational processing and the measured processing capabilities in order to make the downstream processing of these coefficients less computationally intensive, thereby efficiently decoding video bitstream.

Allowable Subject Matter

9. Claims 14-20 are allowed as previously discussed the last Official action as filed on 3/15/06.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to *Shawn S. An* whose telephone number is 571-272-7324.

11. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

12. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

SHAWN AN
PRIMARY EXAMINER

9/02/06